

What is claimed is:

1. A system comprising:

a server coupled to a data communication network, said server being programmed to execute sequences of program instructions for:

5 (a) obtaining textual information for forming messages for a plurality of subscribers,

(b) performing a significant portion of a text to speech process to convert the textual information of at least one of the messages to speech synthesizer instructions, and

10 (c) transmitting the speech synthesizer instructions over the data communication network; and

15 a subscriber terminal for receiving the speech synthesizer instructions via the data communication network, said subscriber terminal comprising a speech synthesizer for synthesizing a speech waveform signal representing the at least one message from the speech synthesizer instructions.

2. A system as in claim 1, wherein the server includes means for transmitting the speech synthesizer instructions over a packet switched data network.

3. A system as in claim 1, wherein the terminal further comprises a programmable central processing unit and an interface coupled to the programmable central processing unit for communication via the data network.

4. A system as in claim 3, wherein the interface comprises a modem.

5. A system as in claim 4, wherein the modem comprises a wireless network data modem.

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6. A system as in claim 5, wherein the wireless network data modem comprises a cellular digital packet data (CDPD) modem.

7. A system as in claim 1, further comprising a mail system for receiving mail messages for subscribers and supplying the mail messages as the textual information to the server for conversion and transmission to the subscriber terminal.

8. A system as in claim 7, further comprising a news information server, said server being programmed to execute sequences of program instructions for:

storing profile information regarding news topics of interest to individual subscribers;

receiving and storing news items from one or more sources;

comparing the stored news items to the stored profile information to identify news items of interest to each individual subscriber;

addressing mail messages containing text information representing the items of interest to subscribers mail boxes in the mail system; and

transmitting the mail messages containing text information representing the items of interest to the mail system.

9. A system as in claim 1, further comprising a unified message management platform for receiving mail messages for subscribers in a plurality of different formats including text format, and at least one other format, converting mail messages from the at least one other format to the text format, and supplying the text format mail messages to the server as the textual information for conversion and transmission to the subscriber terminal.

10. A system as in claim 1, wherein the server also is programmed to execute sequences of program instructions for:

5       storing profile information regarding news topics of interest to individual subscribers;

receiving and storing news items from one or more sources; and

10      comparing the stored news items to the stored profile information to identify news items of interest to each individual subscriber,

wherein said textual information of at least one of the messages comprises one of the identified news items.

11. A system as in claim 1, wherein the speech synthesizer comprises:

a memory storing a plurality of fundamental sound samples, in digitized form; and

5        a concatenative speech synthesizer responsive to the instructions, for processing samples from the memory in an order specified by the instructions and to control parameters of each of the processed samples in a manner specified in the instructions, to thereby generate the 10 speech waveform signal.

12. A network server, comprising:

a computer coupled to a data communication network, said computer being programmed to execute sequences of program instructions for:

5       (a) obtaining textual information for messages for a plurality of subscribers;

10      (b) performing a significant portion of a text to speech process to convert the textual information of the messages to speech synthesizer instructions, each speech synthesizer instruction identifying a fundamental sound and at least one control parameter for controlling

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generation of a waveform corresponding to the fundamental sound; and

15 (c) transmitting sequences of the speech synthesizer instructions, representing the messages, over the data communication network to subscriber terminals for waveform generation in response thereto.

13. A network server as in claim 12, wherein the server also is programmed to execute sequences of program instructions for:

5 storing profile information regarding news topics of interest to individual subscribers; and

receiving and storing news items from one or more sources;

10 comparing the stored news items to the stored profile information to identify news items of interest to each individual subscriber,

wherein said textual information of at least one of the messages comprises one of the identified news items.

14. A communication terminal device, comprising:

a data interface for receiving data from a communication network;

5 a programmable central processing unit for processing the received data to capture speech synthesizer instructions contained in the received data;

a memory storing a plurality of fundamental sound samples, in digitized form; and

10 a concatenative speech synthesizer responsive to the instructions, for processing samples from the memory in an order specified by the instructions and to control parameters of a waveform signal synthesized from the processed samples in a manner specified in the instructions.

15. A terminal as in claim 14, wherein the interface comprises a modem.

16. A terminal as in claim 15, wherein the modem comprises a wireless network data modem.

17. A terminal as in claim 16, wherein the wireless network data modem comprises a cellular digital packet data (CDPD) modem.

18. A terminal as in claim 14, further comprising:  
a keyboard for supplying user inputs to the programmable central processing unit; and  
a display for displaying information provided by the  
5 programmable central processing unit.

19. A method of providing personalized information services, comprising:

storing subscriber profiles relating to topics of interest to a plurality of individual subscribers;

5 receiving items of information from a plurality of sources;

comparing the items of information to the subscriber profiles to identify items of interest to particular subscribers;

10 converting textual information relating to at least some of the identified items of interest to sequences of speech synthesizer instructions;

transmitting each of the sequences of instructions to one or more terminals, each terminal being utilized by  
15 a subscriber;

storing received sequences of instructions in respective subscriber terminals;

in response to one of the sequences of instructions, retrieving sound samples from memory in a subscriber terminal in an order specified by the one sequence of  
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instructions and adjusting process parameters for the retrieved samples in a manner specified by the one sequence of instructions, to thereby generate a speech waveform signal representative of one of the identified  
25 items of interest.

20. A method as in claim 19, wherein the step of converting textual information relating to at least some of the identified items of interest to sequences of speech synthesizer instructions comprises:

5 computing linguistic parameter specifications from input text data;

converting the linguistic parameters into synthesizer control parameters, said synthesizer control parameters identifying the samples in an order corresponding to the input text data and specifying the manner of adjusting the process parameters for the identified samples.  
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21. A method as in claim 19, wherein the step of transmitting comprises transmitting at least some of the sequences of instructions over a wireless data link to a plurality of the respective subscriber terminals.

22. A method as in claim 19, wherein the step of transmitting comprises transmitting at least some of the sequences of instructions via a packet switched data network.

23. A method as in claim 22, wherein the public switched packet data network comprises the Internet.

24. A method as in claim 19, wherein at least one of the respective subscriber terminals comprises a portable device with wireless data communication

5 capability enabling wireless reception of sequences of  
the instructions.

25. A method as in claim 19, wherein at least one of the respective subscriber terminals comprises a personal computer for coupling to a public data network enabling reception of sequences of the instructions via the public data network.

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